

**CLAIMS:**

1. Recording apparatus for recording information in an information layer (101) of a record carrier (10) by irradiating the information layer (101) by means of a radiation beam (12), comprising:
  - a radiation source (11) for emitting said radiation beam for writing, erasing and/or reading information,
  - a control unit (15) operative for controlling the power of said radiation beam,
  - a detection unit (16) for detecting previously written marks in said information layer and for determining the mark widths of previously written marks, said control unit (15) being adapted for controlling write parameters for writing information based on the mark width of previously written marks.
2. Recording apparatus as claimed in claim 1, wherein said control unit (15) is adapted for reducing the write speed and/or for increasing the erase power level of said radiation beam in case of increased widths of detected previously written marks.
- 15 3. Recording apparatus as claimed in claim 1, wherein said control unit (15) is adapted for reducing the write speed and/or for increasing the erase power level of said radiation beam if the width of a detected previously written mark exceeds a predetermined threshold.
- 20 4. Recording apparatus as claimed in claim 2 or 3, wherein said control unit (15) is adapted for setting the write speed and/or the erase power level of said radiation beam such that a previously written mark is completely erased.
- 25 5. Recording apparatus as claimed in claim 1, wherein said detection unit (16) is adapted for measuring of the HF modulation of a previously written mark.
6. Recording apparatus as claimed in claim 1, wherein said detection unit (16) is adapted for measuring the HF crosstalk between adjacent tracks.

7. Recording apparatus as claimed in claim 1, wherein said detection unit (16) is adapted for measuring the signal strength of a previously written signal during the writing of information.

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8. Recording apparatus as claimed in claim 1, wherein said control unit (15) is adapted for gradually reducing the write speed and/or for gradually increasing the erase power level of said radiation beam if the width of a detected previously written mark exceeds a predetermined threshold of multiple threshold levels.

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9. Recording apparatus as claimed in claim 1, wherein said control unit (15) is adapted for setting the write speed based on the previously written HF modulation or HF crosstalk, in particular when a recording action is started.

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10. Recording apparatus as claimed in claim 1, adapted for recording information in an information layer (101) having a phase reversibly changeable between a crystalline phase and an amorphous phase.

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11. Recording method, in particular for use in a recording apparatus as claimed in claim 1, for recording information in an information layer (101) of a record carrier (10) by irradiating the information layer (101) by means of a radiation beam (12), comprising the steps of:

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- emitting a radiation beam for writing information in said information layer,
- detecting previously written marks in said information layer,
- determining the mark width of a previously written mark,
- controlling the power of said radiation beam and the write parameters for writing information based on the mark width of said previously written mark to be overwritten.